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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/832,873	04/12/2001	Almut Kriebel	P20635.P06	1382

7055 7590 04/09/2002

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RESTON, VA 20191

EXAMINER

ALVO, MARC S

ART UNIT	PAPER NUMBER
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1731

7

DATE MAILED: 04/09/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/832,873

Applicant(s)

KRIEBEL ET AL.

Examiner

Steve Alvo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 17-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

The restriction requirement of Paper No. 7 is repeated and made Final. A serious burden would exist if the restriction were not required, as other areas would have to be searched for the apparatus that is not required for the method. The apparatus requires a plurality of impact sections, which is not required by the method.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7 and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 or FR 2, 364,289.

WO 96/18769 (Figure 3) teaches delivering an aqueous fibrous stock (19), pressing out water in dewaterer (18) to form a highly consistent high consistency stock, introducing the stock in predisperser (1) to loosen and distribute the stock, transporting the stock from the predisperser (1, 2) to a second disperser (8, 9) by screw feeder (7). FR 1,239,047 teaches the alternativeness of using a mallet roll (Figure 1) and a disk disperser (Figures 2 and 3) for dispersing paper stock. Or FR 2, 364,289 teaches dispersing paper stock with a mallet roller. It would have been obvious to the routineer to substitute the mallet roller disperser of FR 1,239,047 for the disk disperser of WO 96/18769 as FR 1,239,047 teaches their alternativeness. Or it would have been obvious to the routineer to substitute the mallet roller disperser of It would have been obvious to the routineer to substitute the mallet roller disperser of FR 1,239,047 for the disk disperser of WO 96/18769 as they perform the same function of predispersing and shredding the paper stock. See WO 96/18769, page 2, lines 25-26 for adding steam centrally into the second disperser,

Figure 3, (17). Claim 7 is rejected, as the axis through which the mallets, of FR 1,239,047, rotate would be perpendicular to the transport direction. Claim 13 is rejected as WO 96/18769 introduces the material centrally into the dispersing machine using a screw conveyor; see Fig. 1, (9). It would have been especially obvious to add the steam directly to the dispersing zone of WO 96/18769, as such is taught by FR 1,239,047, see Figures 1 and 3.

Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 or FR 2, 364,289 as applied to claim 1 above, and further in view of German 197 12 653.

WO 96/18769 does not give an specifics as to the disc disperser (7,8). As evidenced by German 197 12 653, such dispersers conventionally have several lines of teeth on the surface of the discs to help disperse the paper stock. It would have been obvious to the artisan that the teeth of German 197 12 653 could be used on the disks of WO 96/18769 to better disperse the paper stock. It would have been especially obvious to substitute the disperser of German 197 12 653 for the disperser of WO 96/18769 as they both are used to heat (with steam supplied to the middle of the disperser) and disperse paper stock.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/18769 in view of FR 1,239,047 or FR 2, 364,289 as applied to claim 1 above, and further in view of DAVENPORT with or without German 197 12 653.

DAVENPORT teaches, col. 14, line 5 to column 15, line 14, using a mallet roller (Figure 8 (62)) to predisperse and shred paper stock to pieces less than 6 inches (152 mm) prior to a disk disperser and teaches that the mallet roller reduces the energy needed to disperse the paper stock. It would have been obvious to use the speed necessary to obtain the desired degree of dispersing

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and paper size. If necessary, German 197 12 653 teaches using a paper length of 5 to 30 mm, see claims 5 and 6, a rotation speed of 10-30 sec. for the disc disperser, see claim 13. It would have been obvious to use a slower speed of rotation for the predisperser of DAVENPORT and/or WO 96/18769 as DAVENPORT teaches that the mallet roller saves energy over other predispersing machines.

Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term 'consistent', e.g. in claim 1, is indefinite. It is not clear if the pulp is highly "consistent", e.g. uniform, or if the pulp is at a high "consistency", e.g. a high solid/liquid ratio. The term "water steam" is indefinite. Water (liquid) and steam (vapor) are the same substance in different forms. It is not clear which form is being claimed. The term "mallet roll" and "mallets" are indefinite. This is not a conventional term used in the art. It is not clear what this term includes. For example, does it include conventional hammer mills? Claim 7, the term "an axis of the mallet roll" is indefinite. Is this the axis of travel or axis of rotation? Claims 14-16, the term "dispersing fittings" do not have a proper antecedent basis.

KRIEBEL et al (U.S. 6,250,573) cited of interest as it is the foreign counterpart of GERMAN 197 12 653.

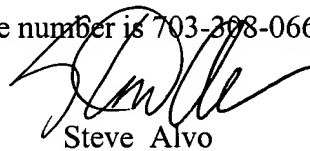
GB 241 053 could not be considered as a copy was not provided.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steve Alvo whose telephone number is 703-308-2048. The examiner can normally be reached on 6:00 AM to 2:30 PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Steve Alvo
Primary Examiner
Art Unit 1731

msa
April 5, 2002